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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,144	01/04/2006	Jin-Kyeong Kim	CU-4236 WWP	8485
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EXAMINER				
LAM, DUNG LE				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/537,144

Applicant(s)

KIM ET AL.

Examiner

DUNG LAM

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6/2/05 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/55/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)–(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The Information Disclosure Statement submitted on 10/23/06, 10/24/07 and 4/28/08 has been considered by the examiner (see attached PTO-1449 form).

Drawings

The drawings are objected to because Figures 1-3 and 5 contain numeric labels which make it hard to understand the invention. The examiner suggests adding alphanumeric labels to facilitate the understanding of the invention. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each

Art Unit: 2617

drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 47.73(b).

4. Claim 1 is are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the corresponding claim 7 of Application No. 10/537846. Although the conflicting claims are not identical, they are not patentably distinct from each other. Claim 1 of the pending application has substantially the same limitations as the combined claims 7 of the co-pending claim. For easy reference the limitations are sequentially labeled from a through d. The correspondence of the claims is as followed.

Limitation 1c of application 10/537144 same as 7b of application 10/537846

Limitation 1a of application 10/537144 same as 7c of application 10/537846

Limitation 1d of application 10/537144 same as 7d of application 10/537846

Limitation 1b of application 10/537144 same as 7a of application 10/537846

5. Claim 6 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the corresponding claim 1 of the copending Application No. 10/537846. Claim 1b through 1c of 10/537846 corresponds to 6a through 6c of 10/537144 respectively. The only difference is 1a of 10/537846 specifically requires that the position is from the base station in which one of the reference shows (see rejection below) that it is an obvious variance to store data either remotely at a base station or at a MS.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8, 10 rejected under 35 U.S.C. 103(a) as being obvious over **Gunnarsson *et al*** (US Number 2003/0118015) in view of **Souissi** (US 2002/0187780).

6. Regarding claim 1, **Gunnarsson** teaches a communication device that connects with a network through a wireless local area network (WLAN) access point to receive data, the communication device comprising ([0018]):

- a GPS receiving module for receiving position information of the connection device from a GPS satellite ([0019]);

- a WLAN module for connecting with the WLAN access point (wlan interface [0018, 0024]);
- a controller for selectively operating the WLAN module based on the position information of the communication device output from the GPS receiving module and the position information of the WLAN access point stored in the storage unit ([0024, 0023, 0025, 0028]).

However, **Gunnarsson** does not specifically teach a storage unit for storing position information of the WLAN access point. In an analogous art, **Souissi** teaches a storage unit for storing position information of the WLAN access point (roaming table of containing geographic locations of preferred networks which can be a WLAN which contains AP [55], [0065-0066, 82-86]). Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to combine Gunnarsson's teaching of the MS to operate the WLAN module to detect a nearby access point with Souissi's teaching of storing the AP location at the MS to make it faster to compare the MS' position with the AP position without having to use the system resources to query the network.

Regarding claim **2 and 10**, **Gunnarsson and Souissi** teach the communication device of claim 1, wherein the position information of the WLAN access point includes a position of the WLAN access point and a service radius of the WLAN access point (Gunnarsson, measured from center of WLAN [22]).

Regarding claim 3, **Gunnarsson and Souissi** teach the communication device of claim 2, wherein the controller operates the WLAN module when the communication device is within the service radius of the WLAN access point (Gunnarsson, measured from center of WLAN [22]).

Regarding claim 4, **Gunnarsson and Souissi** teach the communication device of claim 2, wherein the WLAN module is operated by control of the controller to detect a beacon signal output by the WLAN access point (Gunnarsson, WLAN Interface begins to search for the WLAN [0024]).

Regarding claim 5, **Gunnarsson and Souissi** teach the communication device of claim 1, wherein the communication device is connected to a position information server, which is connected to the Network through the WLAN access point, and receives WLAN access point position information through the position information server to renew the position information stored in the storage unit (Souissi , [75, 78-86]).

Regarding claim 6, **Gunnarsson** teach the method for connecting to a wireless local area network (WLAN) access point, which is connected to a network, for a communication device that includes a WLAN module and a GPS receiving module, the method comprising:

a) continuously checking a present position of the communication device through the GPS receiving module ([18, 19, 24, 25 and 28]);

b) determining an operating point of the WLAN module based on stored position information of the WLAN access point and the position information of the communication device ([22, 24, 25, 28]); and

c) driving the WLAN module to detect a beacon signal periodically transmitted by the WLAN access point, and connecting to the WLAN access point with the detected beacon signal ([24, 28]).

Regarding claim 7, **Gunnarsson** teach the method of claim 6, further comprising: except d) receiving new position information of the WLAN access point. In analogous art, **Souissi** teach d) receiving new position information of the WLAN access point from a position information server that is connected to the network following connection to the WLAN access point, and renewing the stored position information ([86, 55, 75, 81-83]). Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to combine **Gunnarsson's** teaching with **Souissi's** teaching of receiving new position information of access points so that the network can dynamically inform the MS of the changed positions of the APs.

Regarding claim 8, **Gunnarsson and Souissi** teach the method of claim 7, wherein step d) except: transmitting a "New Position Information Verification" message to the position information server through the WLAN module;

In an analogous art, **Eriksson** teach transmitting a "New Position Information Verification" message to the position information server through the WLAN module (device initiates a query, [32-34]); receiving from the position information server a reply

to the above message, that is, a "Position Information Renewal" message (receiving the position information [32-34]) or a "No New Information" message; and receiving new position information of the WLAN access point from the position information server in the case where the communication device receives the "Position Information Renewal" message, and performing processes to renew the position information ([33-34]).

Allowable Subject Matter

7. Claims 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding **claim 9**, the prior art of record fails to disclose all the underlined limitations below in combination with all the remaining limitations of claim 9 and claims 6 through 7.

Claim 9 recites,

"The method of claim 8, further comprising:

the position information server receiving the "New Position Information Verification" message;

checking version information of WLAN access point position information that the communication device has from the "New Position Information Verification" message;

transmitting the "Position Information Renewal" message to the communication device in the case where a first version of the WLAN access point position information

that the communication device has is older than a second version of present WLAN access point position information;

transmitting the "No New Information" message to the communication device if the first version is identical to the second version; and

transmitting WLAN access point position information corresponding to the second version to the communication device after the "Position Information Renewal" message is sent. "

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DUNG LAM whose telephone number is (571) 272-6497. The examiner can normally be reached on M - F 9 - 5:30 pm, Every Other Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Harper can be reached on (571) 272-7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/VINCENT P. HARPER/
Supervisory Patent Examiner, Art Unit 2617